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APPLICATION NO	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO	CONFIRMATION NO
08 926,592	09 04 1997	SHUNPEI YAMAZAKI	0756-1717	7227

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EXAMINER

PERT, EVAN T

ART UNIT PAPER NUMBER

2829

DATE MAILED: 06 18 2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Advisory Action

Application No.

08/926.592

Applicant(s)

YAMAZAKI, SHUNPEI

Examiner

Evan T. Pert

Art Unit

2829

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 03 May 2002 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

PERIOD FOR REPLY [check either a) or b)]

- a) ☐ The period for reply expires 4 months from the mailing date of the final rejection.
- b) ☐ The period for reply expires on (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection. ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. ☐ A Notice of Appeal was filed on _____. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.
2. ☒ The proposed amendment(s) will not be entered because:
- (a) ☐ they raise new issues that would require further consideration and/or search (see NOTE below);
 - (b) ☐ they raise the issue of new matter (see Note below);
 - (c) ☒ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
 - (d) ☐ they present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: _____

3. ☐ Applicant's reply has overcome the following rejection(s): _____.
4. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
5. ☒ The a) ☐ affidavit, b) ☐ exhibit, or c) ☒ request for reconsideration has been considered but does NOT place the application in condition for allowance because: See Continuation Sheet.
6. ☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.
7. ☒ For purposes of Appeal, the proposed amendment(s) a) ☐ will not be entered or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows

Claim(s) allowed: _____

Claim(s) objected to: _____

Claim(s) rejected: 13, 16, 17 and 21-30

Claim(s) withdrawn from consideration: _____

8. ☐ The proposed drawing correction filed on _____ is a) ☐ approved or b) ☐ disapproved by the Examiner.
9. ☒ Note the attached Information Disclosure Statement(s) (PTO-1449) Paper No(s): 40

Continuation of 5 does NOT place the application in condition for allowance because:


Applicant's arguments are not convincing:

First, the proposed claim amendment simply changes the word "preparing" in the claims to the word "providing," with respect to what one does with a pair of electrodes for a plasma processing chamber such as 23 and 25A in Sherman. However, this proposed amendment does not overcome the final rejection. Sherman teaches a "first electrode" 23 and a "second electrode" 25A that clearly EXIST in Fig. 4. Since the electrodes in Sherman exist, they obviously were inherently "prepared" and inherently "provided" for use in Sherman's apparatus. It doesn't matter what one calls the electrodes 23 and 25A: They could be "electrode A" and "electrode B", or the "upper electrode" and the "lower electrode", or the "RF hot electrode" and the "grounded electrode" 23 (supported by notoriously well known grounding depicted in Fig. 2 and understood by those of ordinary skill as not shown in Fig. 4). There are an infinite number of arbitrary descriptors for the electrodes and chamber. None-the-less, the notoriously well-known concept of an RF "electrode pair" in a plasma processing chamber is inherent and clearly taught in Sherman.

Applicant unconvincingly argues that Sherman only teaches etch/cleaning gas entering the "first electrode" (grounded electrode 23) by way of pipe 48 into the OPTIONAL testing device 30 [optional per col. 6, lines 32-35], and not the so-called "second electrode" 25A. However, Fig. 4 clearly shows pipe 47 connected all of the various types of gas supply bottles 46 and Sherman teaches that these "supply ... to line 47" [col. 7, lines 41-43]. Even though the word "deposition" is used in Sherman's sentence at col. 7, the etch gas is called out by Ref 46, and all the Ref 46 gas bottles are drawn as connected to the pipe 47 delivering gases to the upper electrode 25A. Since pipe line 47 leads to the second, or "hot", electrode 25A with showerhead, it reasonable to expect there is a reason it is shown as "connected".

Sherman teaches the claimed etching/cleaning gas can clean away residue left behind from a material like silicon nitride, such material deposited through the second "upper" electrode 25A [col. 1, lines 12-14 and col. 5, lines 24-36]. It is clear that there is nothing unexpected or novel about putting cleaning gas through pipe 47 in Sherman: Sherman teaches that the etch/cleaning gas is connected to deliver through pipe 47 to the upper electrode 25A by drawing it in Fig. 4 and by saying it in words at col. 7, lines 41-43. One of ordinary skill in the art at the time of the claimed invention would implicitly gather the idea of pumping "cleaning gas" anywhere there is a desire to clean unwanted deposits (e.g. nitride) off of equipment piping, fittings, chambers, and electrodes: anywhere there is unwanted residue.

Sherman does not fail to teach any claimed features as declared by applicant. Applicant is reminded that Sherman does not need to teach the exact "words" of the claims, only the "concepts" as limitations [MPEP 2111]. In this case, for one of ordinary skill in the art, the concepts taught by Sherman conjure up everything needed to invoke a desire to apply cleaning gas to and/or through the upper the electrode 25A, the lower electrode, both electrodes at the same time, the whole chamber, individual fittings, or anything else that is "dirty" since a "cleaning gas" will clean and dirty parts obviously benefit from being cleaned by the explicit and implicit disclosure of Sherman [MPEP 2144.01]


6/14/02

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